

Abstract

A lithium ion secondary battery of this invention includes an electrode group that includes: (1) a winding core, (2) a positive electrode containing a positive electrode core member and a positive electrode active material layer carried thereon, (3) a negative electrode comprising a negative electrode core member and a negative electrode active material layer carried thereon, and (4) a porous film formed on at least one of the positive and negative electrodes. The porous film including a filler and a binder, and the positive and negative electrodes are wound around the winding core. The positive electrode and/or the negative electrode have/has, on the initial winding side, a region where the active material layer is carried on only one side of the core member. The positive electrode and/or the negative electrode further have/has a region where the active material layer is carried on neither side of the core member, at a position closer to the initial winding position than the region where the active material layer is carried on only one side of the core member. This structure of the electrode group makes it possible to reduce breakage of the porous film and improve its safety.